REMARKS

Claims 1-25 are pending in the present application. Claims 2, 9, 16, and 18 are canceled above. Claims 1, 3, 7, 8, 10, 13-15, 17, 19, 23, and 25 are amended above. No new matter is added by the claim amendments. Entry is respectfully requested.

FIGs. 7 and 9 of the drawings are objected to for failing to comply with 37 CFR 1.84(p)(5). The specification at page 20 is amended to refer to element S710 of FIG. 7, and the specification at page 23 is amended to refer to S904 of FIG. 9. No new matter is added to the specification. Removal of the objection to the drawings is respectfully requested.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph for reasons stated in the Office Action at page 3, first paragraph through page 4, first paragraph. Claims 1, 7, and 10 are amended in a manner that is believed to be consistent with suggestions made in the Office Action at page 3, first paragraph through page 4, second paragraph. Removal of the objections is respectfully requested.

Claims 1-5 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishna (United States Patent No. 6,981,054). Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishna. Claims 7-14 and 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishna in view of Kawakami, *et al.* (United States Publication No. 2002/0136163).

In the present invention as claimed in amended independent claim 1, "priority data of a packet received by one of a plurality of ports" is determined by "determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet;" "determining whether the packet is a VLAN packet or an IP packet when the priority data are designated to the packet," and "determining a priority by reading priority field data of the VLAN packet or the IP packet." In addition, the present invention as claimed in amended independent claim 1 comprises "determining whether

an address pointer of a packet memory exceeds a predetermined limit value by monitoring the packet memory." At least one "port" is selected to "control packet flow by using the priority data when the address pointer of the packet memory exceeds the predetermined limit value." The "selected at least one port" is directed to "control the packet flow."

In the present invention as claimed in amended independent claim 7, "priority data of a packet received by one of a plurality of ports" is determined by "determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet;" "determining whether the packet is a VLAN packet or an IP packet when the priority data is designated to the packet," and "determining a priority by reading a priority field data of the VLAN packet or the IP packet." "Bandwidth data of each port" is measured. "State data of each port of the plurality of ports" is output by "using the priority data and the bandwidth data." In addition, the present invention as claimed in amended independent claim 1 comprises "determining whether an address pointer of a packet memory exceeds a predetermined limit value by monitoring the packet memory." At least one "port" of the "plurality of ports" is selected to "control packet flow" by "using the state data when the address pointer of the packet memory exceeds the predetermined limit value." The "selected at least one port" is directed to "control the packet flow."

In the present invention as claimed in amended independent claim 15, a "packet flow control device" comprises a "plurality of port control units being respectively coupled to a plurality of ports for determining priority data of a packet received by a port." "Each of the plurality of port control units" comprises a "bandwidth control section for measuring bandwidth data of a port," a "priority outputting section for determining the priority data of a packet received by a port," and a "flow control directing section for requesting a port to produce a flow control packet in response to a flow control signal for directing the flow control from said queue manager." The "priority outputting section" comprises a "priority data extracting section" for "a priority data extracting section for determining whether the priority data are designated to the port or whether the priority data are designated to the packet, for determining whether the packet

is a VLAN packet or an IP packet when the priority data is designated to the packet, and for determining the priority by reading a priority field data of the VLAN packet or the IP packet;" a "port priority outputting section" for "outputting a port priority data when the priority is designated to the port," a "VLAN priority outputting section" for "determining the priority of the VLAN packet by using the read priority data when the priority is designated to VLAN packet," and an "IP priority outputting section" for "determining the priority of the IP packet by using the read priority data when the priority is designated to the IP packet." A "queue manager" monitors a "state of a packet memory," and selects "At least one port to direct flow control by using the priority data determined by the port control units when an address pointer of the packet memory exceeds a predetermined limit value."

It is submitted that Krishna fails to teach or suggest "determining priority data of a packet" by "determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet;" "determining whether the packet is a VLAN packet or an IP packet when the priority data are designated to the packet," and "determining a priority by reading priority field data of the VLAN packet or the IP packet," as claimed in amended independent claims 1 and 7. Krishna discloses a plurality of network switch ports 20, each including a port filter 24 that identifies user-selected attributes of a data frame such as a priority for a data frame, and forwards the user-selected attributes to a switch fabric 25, wherein the switch fabric 25 makes frame-forwarding decisions based on the received attributes (see Krishna, FIG. 1 and column 3, lines 32-43). In addition, the port filter 24 forwards a determined port priority value to a flow control generator 32 for storage in a port table 40 (see Krishna, FIGs. 1 and 2 and column 5, lines 38-44). In this manner, the port filter 24 can be implemented as a state machine that monitors the bytes coming in from the network, hence the state machine can analyze the data frame for the presence of user-selected attributes (such as the priority of a packet) on a per-byte basis as the bytes of packet data of the data frame are received by the network switch port 20 (see Krishna, FIG. 1 and column 4, lines 47-53). Thus, while the port filter 24 of Krishna can identify a priority of a data packet, there is no mention in Krishna of the port filter 24 determining "priority data of the packet" by

"determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet," "determining whether the packet is a VLAN packet or an IP packet when the priority data are designated to the packet," and "determining a priority by reading priority field data of the VLAN packet or the IP packet," as claimed in amended independent claims 1 and 7. In sum, the manner in which Krishna determines priority of a data packet is different than "determining priority data of a packet," as claimed in claims 1 and 7.

With regard to the rejection of independent claim 15, it is submitted that Krishna fails to teach or suggest a "priority data extracting section" for "determining whether the priority data are designated to the port or whether the priority data are designated to the packet, for determining whether the packet is a VLAN packet or an IP packet when the priority data is designated to the packet, and for determining the priority by reading a priority field data of the VLAN packet or the IP packet," as claimed in amended independent claim 15, for at least reasons similar to those described above with regard to amended independent claims 1 and 7. In addition, it is submitted that Krishna fails to teach or suggest a "port priority outputting section for outputting a port priority data when the priority is designated to the port," as claimed in amended independent claim 15, for at least reasons similar to those described above. In addition, it is submitted that Krishna fails to teach or suggest a "VLAN priority outputting section for determining the priority of the VLAN packet by using the read priority data when the priority is designated to VLAN packet," as claimed in amended independent claim 15, for at least reasons similar to those described above. In addition, it is submitted that Krishna fails to teach or suggest an "IP priority outputting section for determining the priority of the IP packet by using the read priority data when the priority is designated to the IP packet," as claimed in amended independent claim 15, for at least reasons similar to those described above.

Therefore, it is submitted that Krishna fails to teach the invention set forth in the amended claims. Reconsideration and removal of the rejections of claims 1-5 and 15 under 35 U.S.C. 102(e) based on Krishna, and claim 6 under 35 U.S.C. 103(a) based on Krishna, are

therefore respectfully requested.

With regard to the rejection of claims 7-14 and 16-25 under 35 U.S.C. 103(a) based on the combination of Krishna and Kawakami, it is submitted that Kawakami likewise fails to teach or suggest "determining priority data of a packet" by "determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet," "determining whether the packet is a VLAN packet or an IP packet when the priority data are designated to the packet," and "determining a priority by reading priority field data of the VLAN packet or the IP packet," as claimed in amended independent claim 7. In addition, it is submitted that Kawakami likewise fails to teach or suggest a "priority data extracting section for determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet, for determining whether the packet is a VLAN packet or an IP packet when the priority data is designated to the packet, and for determining the priority by reading a priority field data of the VLAN packet or the IP packet," as claimed in amended independent claim 15. Instead, Kawakami discloses that when a packet is received in a packet receiving control section 30a of a port, a number of bytes constituting the packet length is counted, and the packet header is decoded (see Kawakami, FIG. 20 and page 14, paragraph [0203]). However, there is no mention in Kawakami of "determining priority data of a packet" by "determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet," "determining whether the packet is a VLAN packet or an IP packet when the priority data are designated to the packet," and "determining a priority by reading priority field data of the VLAN packet or the IP packet," as claimed in amended independent claim 7, or a "priority data extracting section for determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet, for determining whether the packet is a VLAN packet or an IP packet when the priority data is designated to the packet, and for determining the priority by reading a priority field data of the VLAN packet or the IP packet," as claimed in amended independent claim 15.

Accordingly, since neither Krishna nor Kawakami teaches or suggests these claimed features, there is no way to combine the references to obtain teaching or suggestion of the claimed features, and therefore, there is no combination of the references that teaches or suggests the invention set forth in the amended claims.

Since neither Krishna nor Kawakami, taken alone or in combination, teaches or suggests the present invention set forth in the amended claims, claims 7-14 and 16-25 are believed to be allowable over the cited references. Accordingly, reconsideration of the rejection of claims 7-14 and 16-25 under 35 U.S.C. 103(a) based on Krishna and Kawakami is respectfully requested.

Closing Remarks

It is submitted that all claims are in condition for allowance, and such allowance is respectfully requested. If prosecution of the application can be expedited by a telephone conference, the Examiner is invited to call the undersigned at the number given below.

Respectfully submitted,

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